

RESPONSES OF
VIRGINIA ELECTRIC AND POWER COMPANY
HJR 153 FEASIBILITY STUDY
GENERIC QUESTIONS

1. Please identify the major issues/questions that should be addressed by the HJR153 feasibility study.
 1. Capital Cost difference between Underground and Overhead Facilities
 2. Method of retiring existing overhead facilities
 3. Reliability differences between overhead and underground facilities
 4. Increase in cost to expand underground facilities instead of overhead facilities
 5. Life expectancy differences: 50 years for overhead and 30 years for underground
 6. Differences in Operations and Maintenance costs for Overhead and Underground facilities
 7. Environmental impact of widespread undergrounding of facilities
 8. Labor and Material impacts for widespread undergrounding
 9. Allocation of costs
2. Please describe the potential benefits to the public and utility companies associated with the undergrounding of overhead distribution lines.
 1. Improved reliability during storm activity
 2. Reduced Right of Way maintenance costs
 3. Fewer traffic accidents associated with electrical equipment
 4. Improved aesthetics
 5. Increased property values
3. Please describe the potential negative impacts on the public and utility companies associated with the undergrounding of overhead distribution lines.
 1. Higher Capital Costs for utilities
 2. Time required to convert overhead to underground will be significant
 3. The designs are more complex, the materials are more expensive, and the installation takes longer
 4. Cost of modification, expansion, or replacement is higher
 5. Problems are harder to locate and repairs can take longer
 6. Lines are vulnerable to dig-ins and can sustain water damage

4. Please describe in detail the potential obstacles associated with the implementation of a program to relocate overhead distribution lines to underground (for example, statutory, regulatory, technological, economic, safety, and physical obstacles).

The task of relocating the Company's 35,000 miles of overhead distribution lines to underground has four major barriers:

1. Environmental impacts of 35,000 miles of open trenching
 2. This task would require a significant workforce beyond what is available today to complete
 3. Underground cable and support equipment for this size of relocation are well beyond what is supplied by manufacturers at present
 4. This would require a significant retirement of existing electrical plant and a significant increase in new plant to the Electrical Delivery System
5. Please describe the process for identifying and securing right-of-way easements for the relocation of existing overhead distribution lines to underground. What property rights issues would be raised as a result?

Present overhead right-of-way for the Company's 35,000 miles of distribution overhead line would have to be identified and a legal review would be required on a case by case basis to determine if the easement contains the right to locate underground facilities. If the easement does not provide these rights, the land owners would need to be contacted and the right-of-way agreement modified to include this capability prior to undergrounding facilities.

6. In order of importance, list the criteria that should be considered to determine whether the implementation of a program to relocate overhead distribution lines to underground is desirable.

The primary criteria for determining the desirability of overhead to underground conversion is weighing the following cost and benefits:

1. Cost of removal/retirement of overhead facilities, the cost of underground replacement and ongoing operations and maintenance differences.
 2. Improved Customer Reliability
7. In order of preference, describe the potential options for funding the relocation of overhead distribution lines to underground and explain the basis of your recommendation.

Because of the significant increase in cost of relocating overhead to underground facilities, such a program should be offered as an optional improvement funded by the customers receiving the benefits of conversion to underground.

8. Should one or more pilot programs be conducted to determine more precisely the benefits, costs and obstacles associated with the implementation of a program to relocate overhead distribution lines to underground? If pilot programs should be conducted, how could and should the pilot programs be funded?

Knowledge of the benefits, costs, and obstacles of overhead to underground conversion is well developed and a pilot program would not provide additional insight into the issues.

9. Considering the costs, benefits and obstacles associated with the implementation of an undergrounding program, should the General Assembly require utilities to place all or a portion of existing and/or new overhead distribution lines underground? Alternatively, should such decisions be left to local government? Please explain your answer.

Since the decision to place overhead facilities underground is a cost-benefit issue, the decision should be made by the customers who receive the benefit and ultimately will fund the costs. They are in the best position to determine if the benefits warrant the costs.

10. What obstacles, if any, currently prevent a local government from enacting an ordinance establishing all or a part of the locality as an area in which: (a) existing overhead utility distribution lines must be relocated underground over some period of time; and/or (b) all new utility distribution lines must be located underground?

The Company has not determined its position on this issue and we believe it is best answered by local governments and their legal counsel.

11. For the specific purpose of funding the undergrounding of existing overhead utility distribution lines, what obstacles, if any, currently prevent a local government from levying a special tax on the residents and businesses of an area within the locality in which the local government has enacted an ordinance requiring the undergrounding of utility distribution lines? Would such a special tax assessment require specific new authorization from the General Assembly?

The Company has not determined its position on this issue and we believe it is best answered by local governments and their legal counsel.

12. Interested parties are invited also to address all other legal and policy issues they believe relevant to this investigation.

13. Please indicate below your desired level of participation in the feasibility study.

☐ *Placed on the distribution list for all correspondence.*

☒ *Considered as an active participant in the feasibility study.* If you wish to be considered as an active participant, please complete the following:

Field of expertise Electric Power Delivery

Organization Dominion

14. If you are interested in participating as an active participant, would you be willing to serve also as a member of a subgroup to identify, research, and analyze specific issues and provide written summaries of specific topics of study?

☒ *Yes*

☐ *No*

15. Please provide the following contact information:

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